IN THE CLAIMS

Please amend the claims as follows:

1. Cancelled.

2. Cancelled.

3. Cancelled.

4. Cancelled.

5. Cancelled.

6. Cancelled.

7. Cancelled.

8.-21. Previously cancelled.

22. Cancelled.

23. Cancelled.

24. Cancelled.

25. Cancelled.

26. Cancelled.

27. Cancelled.

28. Cancelled.

29. Cancelled.

30. Cancelled.

31. Cancelled.

32. Cancelled.

33. Cancelled.

34. Cancelled.

35. Cancelled.

36. (Amended) A method for diagnosis of blood brain barrier permeability in a subject comprising:

detecting a first elevated level of S100β in the blood of a patient;

identifying a second elevated level of S100β in the blood of the patient; and

comparing first and second elevated levels of S100β wherein a statistically relevant first level of S100β protein is indicative of blood brain barrier permeability without neuronal damage and a second elevated level of S100β is indicative of neuronal damage.

37. The method of claim 36, wherein the second elevated level of S100β has a value which is greater than said value of first elevated level of S100β.

38. Cancelled

39. Cancelled.

40. Cancelled.

41. (Previously Presented) The method of claim 36, wherein said value of said second elevated level of S100β is greater than twice the value of said first elevated level of S100β.

42. (Previously Presented) The method of claim 36, wherein said value of said first elevated level of S100β is in the range of about 0.12 ng/ml to 0.35 ng/ml.

43. (Previously Presented) The method of claim 36, wherein said value of said second elevated level of S100β is in the range of about 0.35 ng/ml.

44. (New) A method for diagnosis of blood brain barrier permeability in a subject comprising:

detecting a first elevated level of S100β in the blood of a patient, said first level of S100β being indicative of blood brain barrier permeability without neuronal damage; and

identifying a second elevated level of S100β in the blood of the patient, the second elevated level of S100β having a value greater than said value of said first elevated level of S100β.

45. (New) The method of claim 44, wherein said value of said second elevated level of S100β is indicative of neuronal damage.

46. (New) The method of claim 44, wherein said value of said second elevated level of S100β is greater than twice the value of said first elevated level of S100β.

47. (New) The method of claim 46, where wherein said value of said second elevated level of S100β is indicative of neuronal damage.

48. (New) The method of claim 44, wherein said value of said first elevated level of S100β is in the range of about 0.12 ng/ml to 0.35 ng/ml.

49. (New) The method of claim 44, wherein said value of said second level of S100β is in the range of about 0.35 ng/ml.

50. (New) The method of claim 44, wherein the first elevated level of S100β is detected using an immunoassay.

51. (New) The method of claim 44, wherein the second elevated level of S100β is detected using an immunoassay.

52. (New) The method of claim 50, wherein the immunoassay is an immunoprecipitation assay.

53. (New) The method of claim 51, wherein the immunoassay is an immunoprecipitation assay.

54. (New) The method of claim 44, further comprising detecting levels of NSE and GFAP.